Remarks/Arguments

Summary

By this Amendment, claims 1 and 3 have been amended, and no other claims have been added to or deleted from the application.

Accordingly, claims 1-20 remain pending in the application, with claims 13-20 being withdrawn from consideration as directed to a non-elected invention.

35 USC 103

Claims 1-11 were rejected under 35 USC 103 as being unpatentable over Sasaki et al. (US 5607718) in view of Miyashita et al. (US 6354913). However, Applicants respectfully contend that claims 1-11 define over the cited references, and in view of the following representations, reconsideration of the rejection under 35 USC 103 is requested.

Initially, it is noted that the PEI of the present invention (amended claim 1) is an additive which reduces the removal rates of a silicon oxide layer and a silicon nitride layer. In contrast, the PEI of Miyashita is a pH controller which is used to obtain a sufficient polishing rate (col 7, line 31). Miyashita et al. does not disclose a PEI that reduces the removal rates of an oxide layer and a nitride layer.

Further, the choline derivative in the present invention (amended claim 3) is an additive which allows the removal rate of the silicon oxide layer to be slightly greater than that of the silicon nitride layer. In contrast, the choline of Sasaki et al. is used for adjusting pH. Sasaki et al. does not disclose a choline derivative which allows the removal rate of a silicon oxide layer to be slightly greater than that of a silicon nitride layer.

Still further, the CMP slurry of claim 1 includes <u>both</u> a pH controlling agent <u>and</u> the PEI for reducing the removal rates of the oxide and nitride layers. Likewise,

the CMP slurry of claim 3 includes a pH controlling agent and PEI and a choline derivative to cause the removal rate of a silicon oxide layer to be greater than that of a silicon nitride layer. As noted above, the references simply teach that PEI and a choline derivative may be used to control pH. Such teachings would not make it obvious to one of ordinary skill to include both a pH controlling agent and PEI for reducing the removal rates of the oxide and nitride layers as recited in claim 1, or to include a pH controlling agent and PEI and a choline derivative to cause the removal rate of a silicon oxide layer to be greater than that of a silicon nitride layer.

For at least the reasons stated above, Applicants respectfully contend that claims 1-11 are not rendered obvious by the teachings of Sasaki et al. and Miyashita et al., taken individually or in combination.

Claim 12 was rejected under 35 USC 103 as being unpatentable over Sasaki et al. in view of Miyashita et al. and Kimura (US 5869392). Applicants request reconsideration of this rejection for the same reasons stated above in connection with claims 1-12.

Further, it is noted that the Examiner relies on Kimura as teaching that the concentration of choline derivative is a result effective variable in controlling pH. However, the choline derivative of claim 12 is for causing the removal rate of a silicon oxide layer to be slightly greater than that of a silicon nitride layer. The Kimura reference does not appear to teach or suggest that the concentration of choline derivative is a result effective variable in the context of claim 12.

For at least the reasons stated above, Applicants respectfully contend that claim 12 is not rendered obvious by the teachings of Sasaki et al., Miyashita et al. and Kimura, taken individually or in combination.

Conclusion

No other issues remaining, reconsideration and favorable action upon the elected claims 1-12 now present in the application are requested.

Respectfully submitted,

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